ABSTRACT OF THE DISCLOSURE

An apparatus encodes 7 input bits into 24 symbols in a mobile communication system. In the apparatus, an encoder encodes 7 input bits into 32 symbols using an extended Reed-Muller code created from a Gold sequence, and a puncturer punctures 8 symbols from the 32 symbols provided from the encoder according to a predefined puncturing pattern, and outputs 24 non-punctured symbols.